

# Recombinant Human CDK1

Cat. No. CDK1-26954TH Lot. No. (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant full length Cdc2 protein (Human) expressed by baculovirus in Sf9 insect cells, with an N terminal enzyme tag, MW 58kDa.
<b>Species</b>	Human
<b>Description</b>	<p>The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is a catalytic subunit of the highly conserved protein kinase complex known as M-phase promoting factor (MPF), which is essential for G1/S and G2/M phase transitions of eukaryotic cell cycle. Mitotic cyclins stably associate with this protein and function as regulatory subunits. The kinase activity of this protein is controlled by cyclin accumulation and destruction through the cell cycle. The phosphorylation and dephosphorylation of this protein also play important regulatory roles in cell cycle control. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.</p>
<b>Tissue specificity</b>	Isoform 2 is found in breast cancer tissues.
<b>Form</b>	Liquid
<b>Storage buffer</b>	Preservative: None Constituents: 25% Glycerol, 50mM Sodium chloride, 50mM Tris HCl, 0.25mM DTT, 0.1mM EDTA, 0.1mM PMSF, pH 7.5
<b>Storage</b>	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.

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<b>Sequence Similarities</b>	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily. Contains 1 protein kinase domain.
<b>Full Length</b>	Full L.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	CDK1 cyclin-dependent kinase 1 [ Homo sapiens ]
<b>Official Symbol</b>	CDK1
<b>Synonyms</b>	CDK1; cyclin-dependent kinase 1; CDC2, cell division cycle 2, G1 to S and G2 to M; CDC28A;
<b>Gene ID</b>	983
<b>mRNA Refseq</b>	NM_001170406
<b>Protein Refseq</b>	NP_001163877
<b>MIM</b>	116940
<b>Uniprot ID</b>	P06493
<b>Chromosome Location</b>	10q21.2
<b>Pathway</b>	APC/C-mediated degradation of cell cycle proteins, organism-specific biosystem; APC/C:Cdc20 mediated degradation of Cyclin B, organism-specific biosystem; APC/C:Cdc20 mediated degradation of mitotic proteins, organism-specific biosystem; ARMS-mediated activation, organism-specific biosystem; Activated TLR4 signalling,

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organism-specific biosystem;

**Function**

ATP binding; Hsp70 protein binding; RNA polymerase II carboxy-terminal domain kinase activity; cyclin binding; cyclin-dependent protein kinase activity;

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